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# ESSENTIALS OF GOOD SKIRMISHING.

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## ESSENTIALS

OF

### GOOD SKIRMISHING:

SECOND EDITION.

TO WHICH ARE NOW ADDED,

A BRIEF SYSTEM OF

COMMON LIGHT INFANTRY DRILL;

A METHOD OF PRACTICE FOR

THE SPEEDY ACQUIREMENT OF PROFICIENCY IN THE USE OF THE RIFLE;

AND SHORT OBSERVATIONS ON SERVICEABLE
APPOINTMENTS AND DRESS.

BY

COLONEL G. GAWLER, K.H.

Late of the 52nd Light Infantry.

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# SIR JOHN MACDONALD, K.C.B.

ADJUTANT-GENERAL TO THE FORCES,

THE FOLLOWING REMARKS,

IN REFERENCE TO ONE OF THE BRANCHES OF THE SERVICE

COMMITTED TO HIS ESPECIAL SUPERINTENDENCE,

ARE, BY PERMISSION,

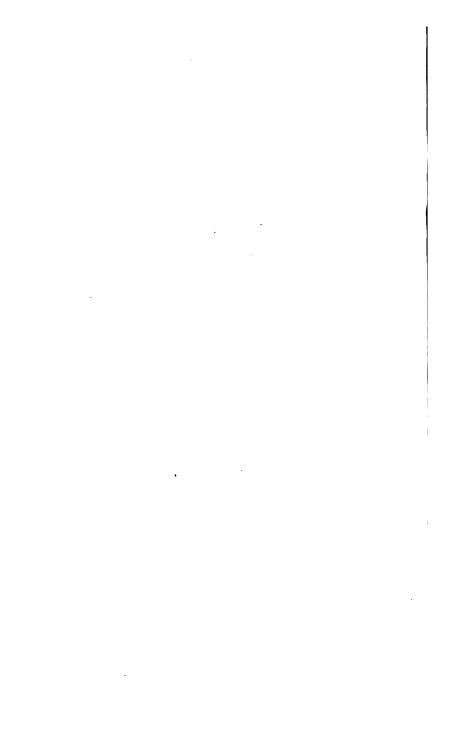
MOST RESPECTFULLY DEDICATED,

BY HIS VERY OBEDIENT

AND FAITHFUL SERVANT,

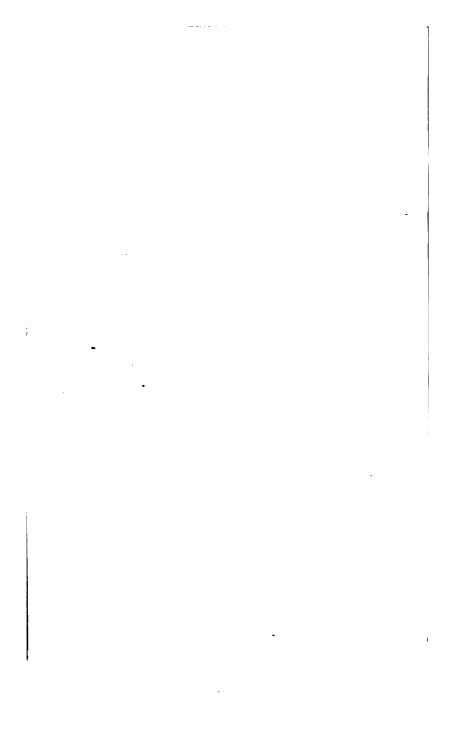
THE AUTHOR.

August, 1837.



# CONTENTS.

|      |   | PAGE |
|------|---|------|
| I.   | The Essentials of Good Skirmishing            | 13   |
| II.  | A system of Common Light Infantry Drill,      |      |
|      | adapted to the Long Range Rifle               | 35   |
| III. | A Method of Practice for the Speedy Acquire-  |      |
|      | ment of Proficiency in the Use of the Rifle . | 51   |
| IV.  | Short Observations on Dress and Appointments  | 59   |



#### PREFACE

TO

#### THE SECOND EDITION.

UNDER the immense increase which is now taking place in the length of range and accuracy in effect of small arms, there must, of necessity, come an increase of the importance of skill in skirmishing. The reconnoissances of mounted staff officers, the patrolling, skirmishing, and menacing of charges by small bodies of cavalry, and even the action of artillery on that very large proportion of the surface of the earth in which vision is limited to at most one thousand yards, will be greatly controlled by the accurate and distant infantry marksman. Nay, even columns and lines of infantry will now only be able to repel his power of destructive annoyance by meeting him with troops in extended order. Of old, if he pressed too near to a closed body of infantry, an impatient volley might sweep him and his comrades into annihilation, but now, ensconced in his distant cover, he may "beard the lion in his den," a battalion of infantry in position, with something like impunity.

With this distant power of the individual skirmisher, however, there stand connected increased difficulties of combination with his surrounding and supporting comrades. Such general unity of action is most important at times for reasonable security, and always for the production of general and total effects.

These advantages must depend, more than ever, upon well-impressed individual acquaintance with the essential principles of good skirmishing.

Under these considerations the following pages, which were received at the time of their first publication with public\* and private testimonials of approbation, are reprinted, with some corrections and additions to make them suitable to the present standard of military efficiency, and with remarks which may be useful, at this period, upon light infantry drill, rifle practice, dress, and appointments.

<sup>\*</sup> Blackwood's Magazine, Oct. 1837, page 521; United Service Journal, Nov. 1837, page 415; Naval and Military Gazette, 1837; &c., &c., &c.

February, 1852.

#### PREFACE

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#### THE FIRST EDITION.

Some high continental military authorities have of late years proclaimed that British soldiers are incapable, or next to incapable, of acting as light infantry. Than this announcement there never was a clearer illustration of the golden maxim, "Assertions are not proofs." If our censors had taken the trouble to search for evidence, southern and western Europe would have told them, that in these portions of the civilized world there have not been known, in the middle and modern ages, light troops superior to those of Britain. In archers, the light infantry of "the olden time," by what nation in the world was England surpassed? Her troops of this class, the direct forefathers of a large proportion of our present soldiery, gained for themselves a name that might, one would think, have sounded even to the shores of the Baltic, which at least has rung upon every ear familiar with the tales of Poictiers, Cressy, and Agincourt. All of these, as described by foreign pens,\* were won mainly by the skill and conduct At Cressy 12,000 Genoese, then of the British bowmen.

<sup>\*</sup> See "Le Nouveau Dictionnaire des Sièges et Batailles," under these articles.

the most renowned light troops of continental Europe, were driven like chaff before unerring cloth-yard shafts from the tough old English yew.\*

Had our critics inquired concerning more modern warfare, their Hessian neighbours would have told them that in the North American revolutionary contest, in that six years' war of surprises, skirmishes, and ambuscades, among unequalled woods and wildernesses, the British soldier in himself was more than a match for the skirmisher-bred American woodsman; and, to say the least, as alert and intelligent at the outposts as his well-trained German fellow-combatants. The struggle, indeed, ended unsuccessfully to Britain; but, let the blame rest where it may, it cannot be thrown upon the British soldier; he never came short of his duty.

In the protracted and astonishing conquest of Hindoostan, which had some European inimical spectators, the flank companies of battalions did three-fourths of the work; not only concentrated at the breach and escalade, but also, when necessity required it, extended in the jungle.

And to come to those contests which offer the fairest estimate of the British soldier as he now is, and with which all civilized military critics may be expected to have become acquainted, the European campaigns of the Duke

<sup>\*</sup> La première ligne des Français etoit composée de douze mille archers Génois. Meurdris et décomfits par les fièches que les archers Anglois leur tiroient si vivement que ce sembloit neige, ils lâcherent le pied et se renversèrent sur la seconde ligne . . . . Philippe, croyant qu'il y avoit de la trahison de la part des Génois, s'ecria: Or tôt tuez cette ribaudaille qui nous empêche la veie saus raison.—Nouveau Dictionnaire des Sièges et Batailles, article Crécy.

of Wellington; it is not sounding an empty boast, but a note of most sober and honest truth to say, that, than the British light troops of his army, better never guarded a camp or fought in a skirmish. In a fluctuating war of eight campaigns, over many hundred miles of varying country, opposed to the bravest and most intelligent soldiers of the continent, none were ever more constantly conquerors in action or more successfully vigilant on outpost duty.

It is true, indeed, that the British light infantry man has a practical system in some important particulars peculiar to himself; and in none more so than that, under all circumstances, he continues the well-disciplined soldier, never systematically assuming the character of the loose, lawless, free-corps freebooter. From this last peculiarity may have arisen the incorrect impressions of our foreign contemporaries. We, however, glory in the difference, and affirm that stern discipline and high soldier-like principle must form the basis of thorough military efficiency to the full as much in the light and extended services, as in those of a more concentrated description.

Free corps originate in long internal wars. Happily for Britain, she of late has not been distinguished for such nurseries of irregular military skill; but when her territories were desolated by them, there were not wanting bodies of this description as active, intelligent, and enterprising as any that ever graced the continent of Europe.

To assist in keeping up the remembrance of the essentials of the practical system of the modern British light infantry man, in that important branch of his duty,

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#### xii

skirmishing; in order that foreigners, whatever be their theories, may continue to receive, when necessity requires it, practical evidence that British soldiers can act as light infantry, is the principal object of the Author in submitting to the army the following observations.

1837.

#### ESSENTIALS

OF

#### GOOD SKIRMISHING.

SKIRMISHING is the art of fighting, with numbers insufficient to occupy, in close order, the ground contested.

In light infantry or skirmishing drill, as in all other instruction, the principal art is, to dwell forcibly on things really essential; moderately on things merely important; and lightly on things nearly indifferent.

#### To good skirmishing there are eight essentials:—

- 1. Active Intelligence.
- 2. Correct Firing.
- 3. Daring Courage.
- 4. Making the best of Cover.
- Presenting the smallest possible Marks to the Enemy's Fire.
- Maintaining Extension from, and Dependence on, a given File of Direction.
- Preserving a sufficient Readiness to resist Cavalry.
- 8. A judicious Employment of Supports and Reserves.

Very deficient in any of these qualifications, skirmishers cannot be of the first order. Possessing them all in

reasonable proficiency, skirmishers must be very good, let the character of their other attainments and systems of drill be whatever it may.

I.

The life and especial mark of the good skirmisher is ACTIVE INTELLIGENCE.

In the ranks, the closer men attain to a state of unreflecting mechanism, with nothing of mind but attention, the nearer they are to true soldier-like perfection. Not a thought should arise, an eye-ball turn, or a finger tremble, but in obedience, and that obedience should be accurate and instantaneous as the word. Not so the skirmisher; within certain limits he is his own general, and must think for himself. From the moment that he "shakes out" from the elbows of his right and left comrades, reflection must awake, and, in due dependence on a broad established system, be energetically directed to gain every advantage on the opposing foe.

The French as skirmishers excel in active intelligence. Every man manœuvres as if the fate of the day depended upon his conceptions. Their ability, in this particular, may spring in a great degree from the looseness of their instruction practice of all field exercise. This, while it is ill calculated to make steady soldiers at close order, is well adapted to give free scope to the natural intelligence of skirmishers.

The mechanical stiffness, formerly much seen in British light infantry, arose, there can scarcely be a question, from the formality of our old ordinary mode of applying the system of light infantry drill. The automatonism, proper to the ranks, was extended to skirmishers, and they also were taught to move only as they were wound up. The indignation of the drill instructor was poured out, not upon men who failed in the first-rate essentials of good

skirmishing, but upon those who erred a foot in dressing or in distance—who did not step off, halt, or fire, precisely at the seund of the whistle or elevation of the signal fire-lock—whose unmusical ears refused to distinguish amid the endless variety of bugled orders—who could not run like racers, or who ran bewildered in some of the intricate evolutions, which were supposed to crown the very pinnacle of skirmishing perfection. Some corps did not drill according to this erroneous method, others did not carry it to its full extent; but, taking the army as a whole, unreflecting precision in the details of skirmishing was its system, and to this day that system has its votaries.

It is no small proof of the strength of natural intelligence in British soldiers, that, when brought into actual service, they broke through the fettered stiffness of their instruction drill, let go what was indifferent in it, clung to that which was important, and soon rivalled their intelligent and experienced opponents.

The true summit of perfection in skirmishing is, the preservation of order in disorder and of system in confusion; for the circumstances which accompany skirmishes of necessity produce, almost always, more or less mixture, inversion, and general irregularity. In hot contests over large extents of intricate ground, men of different companies regiments, brigades, and even divisions, mingle with each other. Soldiers should therefore be drilled, not indeed to fall into such irregularities on principle, but to be ready for them in practice. They should be made at times to skirmish in inverted companies, mixed companies, and mixed regiments-to form good skirmishing lines out of confused masses—to concentrate from similar mixed bodies into squares to resist cavalry, or into lines or columns for the purposes of charging or defending streets of villages, or other defiles—to extend again rapidly, and to perform every necessary evolution as if no mixture or irregularity had occurred.

Such movements, when inculcated as necessary exceptions to good order, do not unfit soldiers for more regular manœuvres; but, by the contrast, increase order and intelligence in them.

Soldiers who have not been drilled on this principle, or who have not acquired it by experience, are, when extended under fire, continually liable to be transformed into unmanageable mobs. Skirmishers who understand it, will always show a formidable front, be ready for every changing event, and, under the worst possible circumstances, act together in the mighty energy of mutual confidence.

Unreflecting mechanical precision is at direct variance with such practice, active intelligence and a wise well-defined general system are its component elements. Active intelligence, therefore, in every point of view, is invaluable to the skirmisher; and the attention of all drill superintendents and instructors should be unremittingly directed to stamp it on his mind and to mix it with his practice.

#### II.

The soldier at close order always has, or should have, a large mark for his fire. Nothing can be more unsteady or unsoldierlike than for a closed body to pour a volley upon mere skirmishers: from troops concentrated, no object but an opposing mass or line within 200 yards should provoke a single shot.\* The skirmisher has not this advantage, his mark is generally small and often indistinct; besides which, the temptation to careless aim is much greater to him, who fires away sixty or one hundred and twenty rounds over hedge and ditch without intermission, than to the battalion soldier, who seldom expends more than twenty at any one

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<sup>\*</sup> With long range rifles, this limit will probably now be eight hundred yards.—(Second edition.)

time. Hence the peculiar necessity for practising light troops to cool steady aim and accurate firing.

The immense importance of very great attention to the ball practice\* of this branch of the service, is too obvious to require an enforcing observation; but it ought to be impressively remarked, that good practical aim is not to be acquired only in front of the target, but to the full as much in the every day drill firings, with or without blank cartridge.

It is not the case that careful firing is provoked by the sight of an enemy; on the contrary, arithmetical calculation has repeatedly proved, to the blush of the good soldier, that under no circumstances are balls so wildly and carelessly thrown away as in those moments when the fortunes of empires are thrown away along with them. In action, the greater number of the musquets are pointed generally at masses of dust and smoke, and not precisely at the dark active figures which they envelop.

For these reasons, on the drill field, instead of the loose careless practice too common in this particular, the soldier, and especially the skirmisher, should be unsparingly compelled to go through the motions of aiming and firing at a precise object, as accurately as if at actual ball practice, until the habit be engraven too deep on his mind to be obliterated by any circumstances of confusion.

<sup>\*</sup> In this branch of instruction, there is unquestionably a very wide field for practicable improvement. In addition to some advances nearer to perfection in the construction of the musquet itself, very much might be done towards the art of using it, in the ways of systematical scientific instruction, and improved local conveniences for ball practice. These of necessity would entail some public expense, but every reasonable outlay towards the maintenance of national military efficiency is true economy, and the neglect of it real extravagance.—(First edition.)

#### III.

Daring courage, as an acknowledged essential to the thorough seldier of every class, it would scarcely have been necessary to have noticed in the present enumeration, did not an opinion appear to obtain, much on the continent and with some in Great Britain, that light troops are required to exercise it in a less desperate degree than men at close order.

Foreigners, when extended, often spend systematically much time in long shots and shy fighting, and give way, as a matter of course, before troops in weightier formations. In the British service this opinion does not prevail; there is no good reason why it should, and it is of great importance to the thorough efficiency of skirmishers that it should not.

The British soldier is as much a grenadier at heart, with a green tuft in his cap skirmishing through a wood, with no close support but his tried and trusty rear-rank man, as he is in designation, when mounting a breach, under a black bear-skin, with ten thousand bayonets at his back.

In extended order he is just as ready, as at any other time, to fix his bayonet and dash to close quarters, if the enemy, on tolerably equal terms, will stand for him; and if his piquet be pressed by a heavy attacking column, he sees no more reason than at any other time, to surrender an inch of ground, as long as he can stand upon it. Very remarkable instances of this kind occurred during the Peninsular war.\*

<sup>\*</sup> The characteristic difference between British and foreign ideas of good light infantry is quietly portrayed at a stroke by Napier, when, in answer to St. Cyr's remark, that "the Migueletes are the best light troops in the world," he observes, "If, instead of fifteen thousand Migueletes, the four thousand men composing Wellington's light division had been on the heights of Cardadeu, General St. Cyr's sixty rounds of ammunition would scarcely have carried him to Barcelona."—Peninsular War, vol. ii. page 104.

It is well that it should be so; for if it be indeed true, as some insinuate, that the British soldier falls somewhat below his continental brethren in the policy of skirmishing, this important essential, persevering unflinching courage, will ever, as it always has done, make up for minor deficiencies, and carry him triumphantly through.

It is useful to observe, how much the flinching practice of foreign light infantry has influenced, and perhaps been influenced by, their systems of drill. The old method, which we borrowed from them, of firing advancing by alternate ranks or files, may be practicable with long shots and cautious movements, but is only partially applicable to the service practice of British light infantry, who, even when close to their enemy, count it most unsoldier-like to fire without an immediately important purpose in view; who seldom fire at all until within two hundred yards of their object; and who, after a few quiet shots to get within the length of their breath and to draw on the enemy's fire, dash at the opposing line of defence with that peculiar rush which may be called "the skirmishers' charge."

The present established mode of advancing firing by "single line,"† is that into which daring skirmishers always de, and of necessity always must, fall. On the drill ground, when required, this mode may be completed to a perfect copy of "the skirmishers' charge," by the sound "deuble quick" at about eighty yards from the supposed enemy's line of defence. The whole then, still partially firing, dash on at an accelerated pace, until, the cover gained, "the halt" is sounded, to take breath behind it, and prepare for another forward effort.

<sup>\*</sup> Eight hundred yards, again, must now be about the proper limit.

<sup>+</sup> With the long range, "the skirmishers' charge" and "single line" must become the exception, and advancing by "alternate ranks" the general practice.

#### IV.

Conduct which in some cases, under fire, is disgraceful, in others is meritorious. The man in the ranks who shrinks away from a shell or cannon ball, or who goes out of his commanded course to cover himself from musquetry, has little claim to the name of a brave soldier; while he who in a trench or battery does not bow low at the cry "shot," or fall prostrate before a blazing shell, or who in a skirmish neglects to make the best of every foot of cover, has no right to the title of a wise one.

The difference arises from the line of military perfection being struck, not according to what will suit or save the individual, but by that which will benefit the general service.

Between the duties peculiar to compact fighting and skirmishing, the distinction should be drawn broad and deep on the drill field; because on the battle field, it is natural on either side to be forgetful.

There are two kinds of cover—ball proof cover, and mere concealing cover. Ragged rocks, large trees, brick and stone walls and buildings, stout fences and thick mudbanks, constitute generally the first class; young plantations, gorse and underwood, hedges, abattis, slight fences and narrow sand hills, the second.

It is for the first that the eye of the good skirmisher continually seeks. The second, after fire completely opens, turned even to best advantage, is worth but little more than no cover at all; and is worse than no cover at all, if the men, which they are much disposed to do, collect in groups behind it.

In this way, that very frequent out-lying piquet defence, abattis across roads, is often more injurious to friends than to foes. Instead of being planted, as an obstacle to the enemy, 100 yards in front of the intended line of defence, it is but too commonly placed on that line, and when the struggle comes, is thickly occupied as a sort of rampart. On such striking objects the enemy's fire concentrates, every ball goes through, and the loss behind is severe.

Skirmishers must not only seek for cover, but make the best of it. Good cover loses half its advantages if stupidly occupied, and ingenuity will often make bad cover ball-proof.

However, notwithstanding all that may be said in favour of "making the best of cover," it must be thoroughly remembered, that this duty, at the moment of a close attack, is altogether secondary to those of courage and activity.

When it comes to short distances, the quicker the affair is settled the less will be the loss of the assailants; and the more daring the front exhibited, the greater the probabilities of success.

At every change of situation supports should, if possible, be placed under cover by their commanders; if exposed, as large bodies they form most inviting marks to the enemy's long shots. This precaution, when opportunities offer, should not be forgotten on the drill field.\*

<sup>\*</sup> Exposed to the long range, it would appear that supports will be often obliged to loosen into extended order.

#### V.

One man at 200 yards \* is a very small mark. Two abreast together, a tolerably good one; three abreast together should almost always be hit, and four never be missed. Our opponents, therefore, in skirmishing, cannot serve us better than by grouping together; and that which we would wish them to do, we ourselves must carefully avoid. Skirmishers should move in single files, t except in thick "concealing cover," when two or three together may, without exposure, increase mutual confidence; or behind patches of "ball-proof cover," on which small groups may concentrate as to temporary breast-works; in either case extending again at once when good cover ceases. Even in single files, men loading should incessantly cover with precision their file leaders, so as to offer marks of but one in front.

In skirmishing, more than in any other branch of warfare, men may be uselessly thrown away; and therefore in this, more than in any other, economy of life and limb should form a paramount object of attention.

On British soldiers also, perhaps more than on any others, it is important to impress these observances; for there is in them such a peculiarly strong national perception of that great military maxim, "concentration is strength," that overlooking its exceptions, they are always powerfully impelled the hotter the fire to group the closer together.

Nothing but deeply impressed instruction, or dearly bought experience, can break in them the bonds of a propensity so thoroughly at variance with good skirmishing.

<sup>\* 600</sup> yards may be the distance now proper for this sentence.

<sup>+</sup> Now, on exposed ground, often in single rank: at the word "form single rank," the rear rank men taking ground to the left, and dressing up into the front line half way between their own front rank man and the man on his left.

#### VI.

In all systems of movement composed of many distinct bodies, there must be a common centre of direction, connexion and extension, or unity of purpose and effect must cease, and confusion, dispersion or concentration ensue. Such a centre there is in the minutely regular mighty moving system of the universe; and from it, down through every degree of importance, to that in the more mob-like progress of a swarm of bees.

Perhaps the greatest defect in modern skirmishing is, that, in extensive affairs, this principle of an established point of direction is not well maintained. However much it may be recognised in mere theory, it is not, in instruction, explained in sufficient fulness, or required with sufficient rigour; and from these neglects arise, in a great degree, the inversions, mixtures, and other irregularities in actual service before noticed.

It is most injudicious to encumber the minds of men and officers with a multitude of intricate or non-essential recollections; but the principle in point involves nothing of this character; it is at the same time very simple and highly essential.

For all skirmishers of the same battalion acting together, until they become thoroughly mixed with other corps—in all cases of movement, excepting only those of changes of front on the principle of the wheel on the fixed pivot, and those of taking ground to a flank obliquely or directly; the centre, or right centre file\* of their own

<sup>\*</sup> This file should be calculated by the flanks and centres of divisions, and not by total arithmetical numbers—also small odd portions of divisions, which may happen to fall into the general formation, must not be taken into account.

battalion skirmishers is THE POINT OF DIRECTION, unless at the time OTHERWISE ESPECIALLY ORDERED.

When detachments from several battalions skirmish together, the battalion of direction for the line in rear, is that of direction for the skirmishers in front, unless at the time otherwise ordered. If no such battalion has been pointed out, the officer commanding the extended line names to the officers in command of detachments the battalion skirmishers of direction, and takes care to keep these last to their true course and object.

Every officer in command of the skirmishers of a battalion has the option, in responsible dependence on the maintenance of the general alignement and proper communication, of changing his point of direction, by order at and for the time being, to the flank file nearest to the battalion skirmishers of direction, or otherwise as circumstances may appear to require.

In all changes of front on the principle of the wheel on a fixed pivot, that pivot is, of necessity, during the evolution, the file of direction.

In taking ground to a flank obliquely or directly, the leading file always becomes, during this movement, and no longer, unless especially ordered at the time, the file of direction.

When skirmishers become mixed and unmanageable, and there is neither time nor opportunity for re-forming them at close order on their covering serjeants, the officer in command fixes upon any man as a point of direction, the others instantly extend away right and left (unless at the time especially ordered to extend to either flank in particular), without regard to their original proper places—double into files—take up the general alignment—

officers and non-commissioned officers with alertness take charge of proper portions, and the whole move and act upon this new centre, as if no inversion or mixture had occurred.

Upon such simple rules, well impressed and strictly maintained, any number of skirmishers may fight over large extents of the most intricate ground, perfectly in hand and without confusion. Or, should extraordinary events produce irregularity, officers in command may easily, in an instant, under the worst circumstances, restore good fighting order, until leisure permits a more regular formation.

In extensive skirmishes, the eyes and feelings of men retiring are powerfully drawn towards the most apparently important points of defence; and upon these, without direct orders, they more or less concentrate. Assailants follow the same impulse, and direct their force principally against these identical strongly occupied points.

Hence follow of necessity on both sides a massing into large marks for the fire of opposing musquetry, sometimes even of artillery—great unnecessary bloodshed in violent struggles, and a neglect on the defensive side of ground which ought to be occupied, and on the assailing side of points which ought to be attacked. Nothing but keeping men in hand by the principle of well understood and well maintained centres of direction can prevent similar evils.

Supports, in their movements, should be guided by the same general principle as skirmishers—that is, the centre or right centre support of each battalion should be, unless otherwise ordered, the support of direction, except in the cases of wheeling on a fixed pivot, or of taking ground to a flank. In the first exception, all conform to the pivot, and in the last to the leading division, unless at the time

otherwise ordered. Supports, not belonging to the battalion of direction, except in the two cases just noticed, conform under the orders of their senior officer to the movements of those which do belong to it, with due regard to their primary duty—the proper support of their own skirmishers.

#### VII.

Skirmishers; by the looseness of their formation, are dangerously exposed to charges from small parties of the enemy's light cavalry; and in districts destitute of continuous fences, but abounding in hollows, isolated patches of wood, or other features convenient for concealment, such attacks may burst forth with most confusing suddenness. Except in ground absolutely impracticable for cavalry, skirmishers must move in constant expectation of them.

The eye of the officer should be accustomed to recognise habitually those frequently occurring posts of defence against cavalry, copses, walls, hedges, ditches, &c., which are preferable to small squares; and the minds of men should be well prepared by previous instruction and explanation, to recollect, in an instant, in what their strength in such cases consists, and to be undaunted in it.

Against great charges of cavalry, large squares are unquestionably the safest and most efficient; but, in opposition to the small dashes which occur in skirmishing, large squares are often impracticable, and small ones more advisable, as being more rapidly formed and broken up.

Squares have a moral strength in proportion to the mutual acquaintance of the men and officers who compose them. Men of the same company stand better together than those of mixed companies, and men of the same regiment better than those of different corps. However,

as in the field thorough mixtures do occur, and as they, if observed, are likely above all other things to bring on charges from the enemy's cavalry, squares of mixed masses should, in instruction, at times be practised.

It is not necessary to describe the different modes by which, on the drill field, men may be thrown into confusion. When this state of things has been brought about, mixed, irregular, rallying squares can be formed by adding the "double quick" to the ordinary sounds for squares against cavalry.\*

The "double quick" is required to mark the necessity for instantaneous irregular masses, in contradistinction to the more regular squares, which on the drill field skirmishers should always endeavour to form, unless at the time otherwise ordered. It cannot be too constantly upheld as a permanent principle that, even in skirmishing, order is the rule and irregularity the exception.

On the signal "double quick" in immediate succession to the sounds established for the formation of squares, tofficers, exercising most actively their intelligence, in proper numbers and at proper distances, hold up their swords or caps, and the men rush round them into masses of defence without any regard to company or other distinctions.

These mixed squares, as well as all others, may "commence firing"—"cease firing"—"advance"—"retire"—"take ground to a flank,"—or "close" to any particular square, by order, or by the simple sounds for these movements. The "close" may be important to form a large

<sup>\*</sup> Or, of course, by the word "rallying squares" from officers in command.

<sup>†</sup> Sounds.—" Alarm" to excite attention, followed by "assembly" for regular squares on the supports, or by "assembly" and "double quick" for instantaneous "rallying squares."

square from several small ones, the cavalry still hovering near.

To these mixed squares also, the word or sound to "extend" may be given. The men then, without regard to regular places, extend away to the right and left from each square, and double into files.

When the ground is nearly occupied, the officer in command fixes on a point of direction, to which the whole conform.

In the event of infantry skirmishers pressing forward to harass a square, or of cavalry endeavouring to prevent its movements by hovering near without charging, one or two ranks from the rear face may, by order, move briskly round by the right and left—double into files—cover the front at a short distance, and rush round again to their places whenever there appears a necessity for the square itself to fire.

In drill in general, and in that of light infantry in particular, instructors confine themselves by far too closely to mere formal directions, to the neglect of pithy practical explanations. In nothing is this last addition more required than in reference to charges of cavalry.

A column of horsemen, coming rapidly on with all its denseness, its height, its dust, its shouts, and its clangour, appears to the untrained mind as altogether irresistible. But appearances are not in themselves realities—let cavalry to the utmost stretch of mortal might,—

"Come as the winds come when forests are rended;
And "come as the waves come when navies are stranded;"

one thing only will be required to enable squares of infantry, like deep-rooted rocks, to disperse these wild winds and waves, right and left, in dust, froth, and confusion—a well impressed knowledge of their own strength; accompanied as a natural consequence, by a deliberate employment of that, when properly used, most destructive weapon, the

musket.\* Nor can more blame attach to cavalry for such results, than would apply to infantry for failing, in clear day-light, before well-barricadoed buildings or well-scarped redoubts. Neither in similar cases owe success, when they get it, to their own conduct or efficiency, but to the needless panic of their enemy.

Such conclusions as to the relative strength of cavalry, are established by a string of facts more or less evident, stretching from Ilium, through Pharsalia, to Waterloo; and every fact is worth a thousand opposing ingenious speculations.

#### VIII.

Contending without a reserve is desperate risk in struggles of all kinds, civil and military. In such predicaments, if fortune frown, well nigh all is lost.

In skirmishes, reserves, including in the first place supports, are not only of great importance as rallying points, in extraordinary cases of misfortune, but also as necessary aids to the ordinary movements of the extended line.

In attacks, supports are useful for filling up accidental gaps in the front line—for prolonging its flanks or covering them obliquely or perpendicularly—for strengthening the skirmishers at any moment that these may find their numbers unequal to important work before them—for relieving them when they or their ammunition become exhausted—for coming up in close order to charge bridges, streets,

<sup>\*</sup> If this were true in the days of the musket, how much more must it now apply to cavalry charges made for one thousand yards under deadly discharges from the rifle! unless indeed artillery be brought against the squares with greatly increased powers of destruction.

villages, or other defiles, too strongly occupied to be forced by the skirmishers, and to serve as bases, when time allows it, for the formation of squares against cavalry.

In defences, in addition to the foregoing duties reversed as to bodies retiring, supports have the highly important responsibilities of leading the skirmishers in the true and best line of retreat—of opening that line in all suitable places for their convenient passage, and of taking care that it be not intercepted by the enemy.

Reserves, particularly so called, supply the places of supports when necessary, and go to the front for any object requiring the intervention of a particularly strong, steady, and concentrated force.

Without express orders, supports should not move forward to occupy accidental gaps in the extended line, except on ground so intricate, or under circumstances so emergent, that the skirmishers themselves cannot readily regain their lost communications.

In most movements, set unvarying sentences of command promote alertness and prevent mistakes.

For prolonging in the same direction the flanks of the extended line—for covering them perpendicularly or obliquely—for strengthening the skirmishers by mixing others with them, or for relieving them; the following set, concise orders to supports obviously present themselves:—

No. —— Support. Prolong the —— Flank.

In the same direction as the general line understood.

Do. — Do. COVER THE — FLANK,

perpendicularly; with moderate licence,
according to the features of the ground,
understood.

Do. — Do. COVER OBLIQUELY THE — FLANK.

An obliquity of one-eighth of the circle,
with the same licence, understood.

Do. —— Do. STRENGTHEN No. ——.

To prevent mistakes, the word "strengthen" to be repeated with sufficient distinctness by the officers and non-commissioned officers of the Support to which it is given, when they arrive near to the skirmishers or the skirmishers near to them.

Do. —— Do. Relieve No. ——.

The word "relieve" to be repeated in like manner, for the same reason.

With regard to strengthening the extended line by mixing its supports with it, it may be objected that, in such cases, when there are no reserves at hand, the great rule of never fighting without them is rejected. It is true, the rule is violated; the party if actually engaged is fighting at a desperate risk, but there are cases in which desperate risks are wise and lawful ventures. These are in the not uncommon events with skirmishers of desperate extremities; at such moments methodical prudence is ill-masked imbecility.

On the 10th of December, 1813, some of the piquets of the light division, in thick weather and a close country, were suddenly assailed by the heads of heavy columns. The division in the rear was scattered in straggling houses. One of the companies on piquet was forced back upon another in support, near the point of junction of two important roads leading directly into the cantonments. Both companies were instantly extended, without any support, into a thick skirmishing line; nothing less would have been effectual. The ground was held with little variation for at least two hours—two heavy attacks were repulsed, every round of ammunition was expended, the brigade imme-

diately in the rear allowed to pack and send off its baggage, and steadily to take up its fighting position, and the piquets to fall back upon it without further molestation. Similar circumstances have no doubt occurred, and may often occur again. The great maxim alluded to therefore has its exceptions, and these, if carefully marked as exceptions, may sometimes with propriety be admitted into instruction skirmishing.

To attack or defend, with concentrated supports, a bridge, the street of a village, or other peculiarly important point, the word is simply passed, "Supports, close on No. ——," the support in front of, or on, that point. Near this division of formation the officer in command places himself; and as each severally arrives gives his direction—"line," "double column," "open," "close," "quarter distance," "half distance column," or otherwise, as may be thought necessary. The support of formation in all cases standing fast as the basis.

To break up the formation, "Supports to your proper places, threes right and left shoulders forward, quick march," will speedily restore all to common skirmishing order.

No duties of supports are more important than those in retrograde movements, of leading their skirmishers in proper lines of retreat; and of opening those lines sufficiently, but not more than sufficiently, for their passage. Circumstances have actually occurred, and, in intricate countries, are likely often to be repeated, of fine fellows, slowly retiring before an overwhelming enemy, their whole attention absorbed upon their front, suddenly finding further retreat intercepted by impassable obstacles, with no alternative remaining but to surrender, or fight their way right and left at the risk of almost utter destruction.

The principles advanced in the foregoing remarks, are not, in the main, of a character to be limited to the details of particular movements; but are rather to be kept continually on the mind, for the purpose of being thrown into effect as circumstances may require. *Practical* differs from formal skirmishing, even more by the style than by the method of its execution.

Not one sentence, it is believed, will be found to stand in opposition to the British established system. The few points in which they may at first sight appear to differ from it, consist simply in an application of principles already established to a practical extent somewhat beyond that usually adopted. If an officer who did not act upon this extent of application, were to succeed in the command of a corps to one who had adopted it, neither he nor those under him would experience any difficulty from the previous practice.

It should not be forgotten, that the thorough spirit of practical skirmishing is not to be communicated or maintained, with only one or two companies at a time, on the level, restricted, drill field. Soldiers, after having been thoroughly grounded in elementary details and permanent principles, should be often taken out in large bodies to skirmish, with strict, universal and incessant attention to the duty, across extensive and intricate tracts of country.

Such tracts are often to be found without restrictions in foreign stations; and at proper seasons of the year, a little management and promises of repairing damages will generally procure access to admirable skirmishing ground from British farmers and landed proprietors.

The writer is conscious that he can have advanced little, if anything, that must not have occurred to officers who have had experience in this branch of warfare, or that may not have been brought into instruction practice by them. He has not, however, seen the foregoing practical applica-

tion of essential principles thrown broadly into print; and it appears to him important that it should be so exhibited, in order that the spirit of actual skirmishing may not be confined to the regimental locality, or cease with the regimental employment of those who witnessed it,

# A BRIEF SYSTEM

OF

# COMMON LIGHT INFANTRY DRILL,

ADAPTED TO THE LONG RANGE RIFLE.

# Ordinary Rules.

- 1. The company or division of about sixty men, is the unit of extended Light Infantry, in the same manner as the battalion of about six hundred men, is the unit of a large military force at close order. Every company, or portion of a company, acting as Light Infantry, is therefore kept in hand by its immediate commander.
- 2. Extensions from close to skirmishing order, are always from the centre of the company or portion of the company, unless at the time otherwise ordered.
- 3. Closings from skirmishing to compact order are always to the centre, unless at the time otherwise ordered.
- (In both of the foregoing cases the word "centre" is usually uttered, but the rules are necessary for the prevention of uncertainty in circumstances of rapidity.)
- 4. Extensions are in single files six paces apart, and firings are carried on by alternate ranks, front rank commencing. The front rank and rear rank man must never be unloaded together.

# When not firing.

- 5. All movements are in "quick time."
- Skirmishers when halted, stand, with arms ordered.

When firing has commenced.

- 7. All movements of skirmishers are at the "double quick."
- 8. Skirmishers while halting, on open ground drop on the right knee; on intersected ground they make the best of any cover near them, choosing their own bodily position.
- 9. In advancing, men whose rifles are loaded always pass by the right of those who are loading; and in like manner in retiring, men who are not loaded pass to the proper left of those who are nearly ready to fire.
- 10. In advancing, all load "as front rank," rifles on the left side, muzzles to the front; in retiring all load "as rear rank," rifles on the right side, muzzles to the rear.
- 11. In all movements directly to the front or rear, the right centre file of the company skirmishers, is the proper *file of direction*, to whose course all others conform, and from towards which they keep their relative distances.
- 12. In all movements directly or obliquely to a flank, the leading file of that flank is, for the time being, the file of direction.
- 13. In all changes of front on a fixed pivot, the file which is that pivot is, of necessity, for the time being, the file of direction. (See on this most important particular of "the file of direction," Article VI. of "The Essentials.")
- 14. Troops skirmishing at a greater distance than three hundred yards from the line or column, should retain one half of their number in support. (See on this subject Article VIII. of "The Essentials.")

- 15. Skirmishers ordered to "form square," close upon their supports.
- 16. If the bugle be employed, the less of it the better, provided the order be distinct to all concerned in it.
- 17. The last note of a bugle order marks the moment for the commencement of obedience to it.
- 18. All verbal orders and bugle commands not understood by the skirmishers, should be repeated in a low but distinct tone by officers and non-commissioned officers in charge of sections.

Almost all of these "ORDINARY RULES" may be altered, at the time, for extraordinary and temporary purposes. As for instance: No. 1, portions of different companies may be placed by superior orders under one commander, to control them as if they were of one company. and 3, extension, may be ordered "from the right," "left," or any particular file, and closing, in like manner. "double files," may be ordered for mutual protection in going through thick cover; or, "single rank," under heavy fire in open ground, and the distance between the files may be contracted or enlarged, in order to occupy less or more ground. Nos. 5 and 6, skirmishers, not firing, may be ordered to "double quick," to "kneel," or to "lie down." Nos. 7 and 8, skirmishers, firing, to "common quick" or to "stand up." No. 10, the file of direction may be changed to any other file that may for the time being suit the purpose of the commander. No. 11, skirmishers running towards their supports to form squares, may suddenly be arrested by the order "rallying squares," for instantaneous irregular formations, &c. &c. Such measures being (it is repeated as very important) the temporary exceptions, and the "ordinary rules" the standing practice.

Careful consideration has been given in regard to the "ordinary rule" No. 7, that, under fire, all movements of skirmishers should be at the "double quick," inasmuch as it is at variance with the practice hitherto pursued in

the British army, of saving the soldier as much as possible from efforts of extraordinary exertion. The author's careful proof of the long range rifle, on the low water smooth sands of an extensive sea beach, in which the final course of every bullet was marked, added to the great amount of other testimony on the same subject, have convinced him, that, for the future, within the range of eight hundred yards, all movements under the fire of a well posted enemy must be at the "double quick," to avoid ruinous destruction. If the distance required cannot be surmounted in one effort at such speed, it must be traversed by successive dashes to intervening cover.

# Details of Common Movements.

Company or division, say of sixty men, at close order in line two deep, told off into "threes," "right and left files," two "sub-divisions" of fifteen file each, including four "sections," two being of eight files and two of seven files, the larger numbers always on the flanks.

## COMMAND-"FROM THE CENTRE EXTEND,"

The centre file (the left file of the right sub-division) stands fast, arms ordered, the remainder of the right sub-division turn to the right, the whole of the left sub-division to the left, arms at the long trail (horizontal in the right hand), step off, first file on each side of the centre at six paces halted and fronted quietly by the rear rank men, take up the bodily position of the centre-file, whatever it may be,—the others successively do the same as their relative distances are gained.

- "FROM THE RIGHT EXTEND."
- "FROM THE LEFT EXTEND."
- "From the Fourth File from the Right extend eight paces."

"From John Wilson extend three paces." On precisely the same principle.

Division extended in single files.

"DOUBLE FILES."

The "left" files close to their respective right files.

"SINGLE FILES."

The left files return to their former places.

"SINGLE RANK."

Rear rank men divide the distance between their own front rank men and the next front rank men towards the left.

"Two DEEP."

Rear rank men return to their ordinary places.

"CHANGE FRONT TO THE RIGHT, ON THE CENTRE."

The centre file faces to the right, all files to the right of it turn to the right about; the whole, except the centre file, step off, moving by the shortest lines to take up their relative distances, as before, from the pivot file, on the new line which it has given; the direction of which line, moreover, may, in all similar cases, be at the time moderately varied by the officer in command.

CHANGE FRONT TO THE RIGHT, ON THE RIGHT FILE.

- " TO THE LEFT, ON THE RIGHT FILE.
- " TO THE LEFT, ON THE LEFT FILE.
- " TO THE RIGHT, ON THE LEFT FILE.
- " TO THE RIGHT, ON (any) FILE.
- " TO THE LEFT, ON (any) FILE.

On the same principle the file named facing in the direction ordered, and the remainder moving to the front or rear, BY THE SHORTEST LINES, to gain their former relative places in the new line of formation.

#### "ADVANCE."

Move forward; distances and general line from the file of direction.

#### "RIGHT INCLINE."\*

Each file makes a half turn to the right, maintaining the line in the same general direction as before, though moving obliquely.

## "RIGHT TAKE GROUND."\*

Full turn to the right, following the right file.

#### "RETIBE."

Turn to the rear, rear rank men leading.

#### "HALT."

Come to the proper front, and stand fast with ordered arms.

#### "COMMENCE FIRING."

In open ground the skirmishers drop on the right knee; in intersected ground they make the best of any near cover (see "the Essentials," Article IV.) Front rank men fire, (even on the drill field carefully covering an object—"Essentials" II.;) and when these have nearly re-loaded, the rear rank men give their fire in like manner, and so on. Front rank load "as front rank," muzzles to the front; rear rank "as rear rank," muzzles to the rear.

With the bugle, the "right incline," or "left incline," sounded once, is understood to mean the half turn, twice (with a well-marked interval) the full turn.

#### "ADVANCE."

The front rank dashes forward fifty paces at the "double quick," drops on the knee or makes the best of cover, and fires (as the rear rank by that time will have loaded). The rear rank then springs forward to fifty paces in advance of the front rank, repeating the same practice, and so on, alternately. The centre file of direction giving in a general manner the time of starting and the distance.

# "Single Line advancing." "Common Quick."

(The "cease firing" not having been ordered).

The rank which is loaded steps up to one pace in front of the rank that is loading, both advance together loading and firing as they move on; the man who has fired stepping a little to the left, to allow his comrade to pass in front of him.

(In this mode of "firing" in "single line" "advancing," there can be no running or kneeling. It may be especially useful against small and distant bodies of cavalry.

The skirmishers may "TAKE GROUND TO THE RIGHT" OR "LEFT," in "SINGLE LINE FIRING" to the front, on the same principle.

#### "ALTERNATE RANKS."

The front rank dashes forward fifty paces as before, all kneeling again at the halts.

## "RETIRE."

The rank which happens to be in front gives its fire, and retires at the "double quick" to thirty paces in rear of the rank that is loading, and so on successively; with the simple difference of principle from firing advancing, that, whereas, while advances under accurate fire from long ranges cannot be too rapid, with due regard to the preservation of physical strength and correct firing, retreats cannot

be too slow and dogged, with due regard to the danger of being pressed too closely by the enemy. Fifty paces of interval are therefore fixed as the "ordinary rule" for the advance, and only thirty for the retreat.

#### " CEASE FIRING."

After this order, not one shot. All finish loading, the rank which happens to be in front stands up, "arms at the order;" the rank which happens to be in rear moves forward and joins it, taking up the same position.

## "To the Centre, Close."

The centre file stands fast, all to the right of it turn to the left, all to the left of it to the right, all but the centre file step off, rifles at the long trail, close upon the centre, halt, front, and take up the same bodily position as the centre file. If it has been ordered in the mean time to "fix bayonets," the others fix bayonets successively as they come up: if to shoulder arms, the others successively shoulder, &c., &c.

"To THE RIGHT, CLOSE."

"LEFT, CLOSE."

"any file), CLOSE."

On precisely the same principles.

Company in line two deep.

"RIGHT SUBDIVISION, COVER THE FRONT."

The officer commanding the right subdivision gives the words—

"Right subdivision," "trail arms," "quick march," "from the centre extend."

At the last-mentioned word, the centre file going steadily to the front, all to the right of it bring forward the left shoulder, and all to the left of it the right shoulder, so as to open out, successively, to the proper extended distances from the centre; each file turning full to the front as it gains its distance. The left subdivision has now become "the support." When the line of skirmishers attains to a proper distance, it receives the order

#### " Halt."

This interval, in a tolerably open country, under the long range, should scarcely be less than three hundred yards; though, on the drill field, to save time, this and other similar distances may be, when it is desirable, contracted.

Any body of infantry on the march in line may "extend" from any named file on the principle just described; and, on the same principle, skirmishers on the march may "close," by bringing up the shoulder so as to join successively the file indicated which has kept its straightforward course.

For the very important duties of supports, see "The Essentials," Art. VIII.

Right subdivision extended, left subdivision in support.

"LEFT SUBDIVISION, RELIEVE." ("The skirmishers" understood.)

The left subdivision receives the words from its commander—

"Left subdivision," "trail arms," "quick march," "from the centre extend."

The centre file of the support marches straight upon the centre file of the skirmishers, the remaining files of the support bring forward their shoulders right or left so as to open out successively to their proper distances from the centre as skirmishers, turning again full to the front when these are attained. On reaching the line of the former skirmishers these last-mentioned receive the order,

"Right subdivision," "retire," "to the centre, close."

The centre file of the new support proceeds straight to the rear, rear rank leading, the other files close upon the centre successively; the support is halted at its proper distance, the new skirmishers having, in the meantime, taken up the position and employment in all things of those relieved.

If the skirmishers are advancing when the order to "relieve" is given, they receive the word "halt," and allowing the new line of skirmishers to pass through them to a sufficient distance to the front, close to the centre, and follow on in support.

If the skirmishers are retiring when the order to "relieve" is given, the support "halts," "fronts," and "extends" upon its own line. Continuing the "retreat" so soon as the new support, having closed, has attained its proper distance.

If "commence firing" has been given before the order to "relieve," the relief takes place upon the principles just above described, with these additions—that if relieved at the halt, the old skirmishers spring up as the new skirmishers are reaching them and "double quick" to the rear one hundred paces before they begin to close—if in advancing, the new skirmishers "double quick" one hundred paces from the rear, and the same distance to the front of the old line, the latter lying down, and not rising or closing until the relief has opened its fire; and if, in retiring, the old support lies down so soon as it is extended, and allows the former skirmishers to pass through it at the "double quick" (continued for one hundred yards) before it springs upon the knee and opens its fire.

The important object of the running and lying down in relieving under fire of course being, that the new and old

lines of skirmishers should not be exposed when near together as large marks for the enemy's shot.

One subdivision extended, the other in support.

Word of Command, "FORM SQUARE;"

or,

The right section of the support wheels back half a quarter circle (45°) on its left, the left section half a quarter circle on its right, stepping back one or two paces so as to let the left of the right section overlap its right. The right section wheels up by threes to the left, the left section by threes to the right, threes close to the front and then face outwards, thus forming half a three deep square with the angle to the front. "Fix bayonets" and "commence firing" (outward rank kneeling in reserve) if the front is clear and the enemy near. Skirmishers run in and form the two rear faces of the square three deep, keeping to the right and left in running in so as not to hinder the fire, and not fixing bayonets until in their places.

The faces of the square are wheeled back so as to stand diamond like in reference to the general line, in order that the fire may be thrown clear of your own neighbouring squares.

#### "CEASE FIRING."

# "RIGHT SUBDIVISION COVER THE FRONT."

The subdivision so ordered receives the words (as before) "unfix bayonets," "trail arms," "quick march," "from the centre extend," and proceeds to its extended line, the men of the other subdivision fall into their proper places in line two deep as the support.

Word of Command, "FORM SQUARE;"

OI

Bugle . . . . . "ALARM," "ASSEMBLY."

The formation commenced as before, but the enemy being too near to allow of its completion, the order is given—

Word of Command, "RALLYING SQUARES;"

or,

Bugle . . . . . . "DOUBLE QUICK:"

upon which the support clubs into a solid mass, facing outwards on all sides; and with all skirmishers the "officers, exercising most actively their intelligence, in proper numbers and at proper distances, hold up their swords or caps, and the men rush round them into masses of defence."—(See "The Essentials," art. VII.)

#### ADVANCED AND REAR GUARDS.

An advanced guard, on a road on the line of march, consists of a large reserve, a small reserve, a support and skirmishers. The first of these, according to the "Field Exercise of the Army," may be one subdivision, about five hundred yards in advance of the head of the main column; the second, a complete section, two hundred yards further on; and the third, one hundred yards more in advance, the remaining section of the company, throwing out one hundred yards again to its front a double file of skirmishers on the road, and a double file (if the strength of the section admits of so many) obliquely to each flank.

It is of course of the highest importance that this formation, in the whole of its progress, (maintained frequently through a long day's march, in thick weather, and through intricate roads,) should be preserved in perfect unity by links of ocular connexion. No one portion of it should ever be, for many minutes at least, unseen by some other portion. For this reason, the distances of separation must vary with the hour of the day, the nature of the country, and the state of the weather, and one or two files of communication should remain midway between the several detachments.

The ordinary mode of forming an advanced guard of course is, for the body composing it to proceed along the intended road, dropping its different portions and files of communication as they successively attain their relative distances.

A rear guard is an advanced guard faced to its proper rear.

The foregoing details of the common rules and practice of Light Infantry drill are susceptible of being extended into a very wide range of field application. Upon this subject, much has already been advanced in the Ist, VIth, VIIth and VIIIth Articles of "The Essentials of Good Skirmishing."

# BUGLE SOUNDS.

No. I. Extend.



No. II. Close.



No. III. Advance.



No. IV. Halt.



No. V. Fire.



No. VI. Cease Firing.



No. VII. Retreat.



No. VIII. Assembly.



# No. IX. Incline to the Right.



No. X. Incline to the Left.



No. XI. The Alarm.



The Quick Time.



The Double Time.



## A METHOD OF INSTRUCTION

FOR THE

## SPEEDY ACQUIREMENT OF PROFICIENCY

IN THE USE OF THE

## LONG RANGE RIFLE.

The recruit or pupil must FIRST have his intelligence distinctly informed, and his memory strongly impressed, with what the Rifle can be made to do at any given distance. He will thus be prepared for instruction, SECONDLY, in the art of making it do what it can do.

The first particular may perhaps be accomplished to full satisfaction by the following method. The trials that now induce the proposal of it,\* were, with the regulation musquet, very satisfactory. The various degrees of the power of the weapon were, to the extent the experiment was carried, accurately ascertained and distinctly exhibited.

A piece of level ground must be set apart for rifle practice. The length, with the present power of range, should be from 1400 to 1500 yards. Forty feet would be sufficient for the width, excepting at the permanent butt, where, for security's sake, it should be at least forty yards. It would be very desirable that no boundary straight walls or fences should guide the eye to the target. At the permanent butt, a racket court wall should be built, from

<sup>\*</sup> Made carefully, with soldiers of the 52nd Regiment, on a retired sea-beach in British North America, in the years 1825-6.

thirty to forty feet high, and from thirty to forty yards wide, with side-wings, to stop glancing shot.

Ten yards in front of this centre should stand a wooden target, painted white if the wall be painted black, or vice versa; with a "bull's-eye" at four and a half feet from the ground—this target being divided into square feet by lines, easily distinguishable through a small telescope from the furthest extremity of the range.

From this wooden target, as a commencement, the practice ground should be marked off into lengths of fifty yards each. At each of these fifty-yard stations, two sockets should be sunk into the ground, to hold, when required, the *outer frame* of an intermediate target.

The inner frame should hang by hinges on the outer, so as to open and shut as a door.

It should be covered with the most yielding material (paper or otherwise), that would stand with an ordinary wind, so as to offer the least possible resistance to a passing bullet.

It should be painted with a "bull's-eye" and lines, corresponding precisely with those of the wooden target. The wooden target station should be provided with a ball-proof sentry-box for the marker, on wheels; and each of the intermediate stations with a like ball-proof sentry-box, a long wooden shed, with a locker in it for the paper target, and a very solid and steady rest on wheels, with a groove at the top for the steady firing from it of the rifle, at the same height from the ground as the "bull's-eye" in the targets.

To prevent accidents, four or five bells should be hung on pillars at intervals on the side of the line of practice, with short flag-staffs above them, for the hoisting of signals.

The size of the paper targets should be calculated to include the widest ordinary variations of the bullets. Three feet might be sufficient for the furthest from the

butt, the width gradually increasing to twelve feet, at the nearest station to the wooden target. The height must rise and fall, as far as it might be practicable, with the line of the ordinary highest flight of the bullet.

Fifty yards have been given as the proper interval between the paper targets, because that distance suited the round ball and regulation musquet. The very elongated parabola of the course of the conical bullet may admit of that course being sufficiently shown in paper targets one hundred yards apart.

It did not appear, in the experiments made, that the resistance of the paper had any effect of consequence on the flight of the ball. This of course would depend much upon the texture of the covering material. In calm weather, a little water sprinkled on the paper targets would really make resistance nominal.

The foregoing preparations being completed, and the instructor having, by means of them, made himself well acquainted with the powers of his rifle—that rifle, moreover, being of the kind which his recruits or pupils are to bring with them—the squad takes post at the longest effectual range station,—we will say, for the ordinary infantry rifle, at eight hundred yards.

The paper targets are left open, and the wooden target with its "bull's eye," seen. The wooden rest is placed in the centre, and a rifle laid steadily in it, at the elevation given by the instructor as necessary for hitting the distant "bull's eye."

To prevent accidents, this rifle is not cocked. At a signal given the paper targets are shut, beginning with the nearest to the butt, the recruits being made to remark, as they are successively closed, that the "Bulls' eyes" are in a perfect line. The nearest bell is rung; two minutes are allowed for persons on the line to run into the ball-proof sentry-boxes, and the shot is steadily fired.

The distance and elevation of the rifle being carefully

entered in the firing-book, which every pupil should possess, the squad proceeds to trace, by the paper targets, the course of the ball to its ultimate destination. At every target, the height or depression of the shot in inches from the central line of the "bull's eye," is carefully observed, and noted down—the point blank distance is especially entered. The shot-holes, in the meantime, are covered with the smallest possible patches of fresh paper, or, in the wooden target, plugged.

The squad then returns to the next nearest, or seven hundred yards' station, repeats the same process of levelling a rifle at the elevation ordered by the instructor, and of tracing and noting down the course of the ball; and so on, diminishing each time a hundred yards, and at last to fifty from the target.

By a systematic course of this kind, for which four hours, or half a day, would be sufficient, about twelve men might attain a permanent ocular knowledge of the power of their rifles on level ground at every possible range. It would, of course, be necessary that the rifles and charges should be uniform in size, weight, and quality. The effect of strong side winds upon the bullet (which is considerable) might also sometimes be shown, and rifles accurately proved one against another.

It is very possible to make a rest in which the discharge will only occasion a *direct* recoil, and it would therefore seem that, with due attention, this mode of proof, and this instruction in what the rifle will do, might be carried very near to perfection.

The next step is to make the soldier do for himself what he has seen his rifle, if properly managed, will do.

For this purpose, the paper targets and frames must be cleared away and stowed in the lockers, the rests wheeled off the line, and half the squad (six men) assembled, rifles not loaded, at the fifty yards from the wooden target station.

The first man is placed in the line of the "bull's eye," the rest of the squad lodging their arms in a rack under the shed, and returning to watch the practice attentively.

The man to fire, having loaded very carefully, is asked by the instructor—

- Q. What is your distance from the mark?
- A... yards.
- Q. What must be the elevation, or depression?
- A. . . . . inches above, or below, the bull's eye.

If he should forget, or be incorrect, he is not to be set right by the instructor, but made to refer to his own firingbook for information. Of course, if the rifle be provided with carefully-proved sights, he should be taught to make use of them.

He is then warned to bring up the rifle quietly from the hip, looking, while he does so, at the point he wishes to hit, to shut the left eye close, and to look with the right eye through the sights themselves, and not over or beneath them, to pull the trigger steadily the moment the object is accurately covered, at this instant throwing his attention to the care of keeping the line of barrel direct to the mark until the bullet has left the muzzle—perhaps the most difficult attainment in ball practice, and that which constitutes the greatest difference between a good shot and a bad one.

These principles being clearly communicated, the nearest bell is rung, a minute's delay given for short distances, and two minutes for long ones, and the shot is fired.

The marker instantly steps out of his ball-proof box, with a light pole, having at its extremity a bright scarlet circle, which he lays upon the shot-hole in the wooden target—the number of inches above or below, and right or left, of the centre of the "bull's eye" is entered in the firing book—the man falls back to the squad, and the next for firing takes his place.

If a man hit very wide of the proper mark, it might be well to make him fire until he had attained a reasonably good shot, charging to his account the surplus ammunition so expended.

The squad would then fall back to one hundred yards from the wooden target with a repetition of the same practice, then to two hundred, and so on to the longest range. Not more, probably, than three stations could be got through in a day, by any one squad, with advantage.

At the end of each day's work, a careful return of the details of firing should be sent by the instructor to the commanding officer, in conformity with which, rewards, commendations, and censures, might be finally distributed.

The details of proceeding have been somewhat minutely described, because this elementary instruction, to form a solid and effectual basis for subsequent general practice, should be a minutely patient and careful work. In order, also, to prevent the serious accidents which want of system might occasion, especially at the long ranges, it would be important to establish and maintain minute uniformity of proceeding.

Such a course as that above recommended would only occupy four days, and it would make a man for all his life, if he had the talent to profit by it, a good marksman, with rifles of the same power as that which he had thus carefully proved.

This elementary instruction would not, of course, set aside more free and desultory practice at other times, provided it were carried on with obedience to the general regulations for security against accidents.

It is almost superfluous to observe, that the instructors provided with the "stadia," and with small telescopes headed with simple "micrometers," should point out to officers and men the readiest methods of calculating distances.

Taking twenty-five as the average number of pupils that could be, with full advantage, under daily practice, and four days as the period for completing their instruction, one hundred and fifty might be thus finished in the twenty-four (as an average) working days of each month, a battalion of about six hundred men in four months, and consequently twelve hundred men in the eight temperate months (from about the 1st of March to the 1st of November) in each year.

To complete, therefore, the British army on home service in one year, there would be required about forty such establishments scattered throughout the United Kingdom, and for the volunteer rifle corps and militia about fifty more. After the year of theoretical instruction, they would remain as most useful for freer practice.

The expense would be, the cost of the land, which (considering that strips of worthless soil, or of government ground, might in many instances be procured gratis) should not exceed five hundred pounds the station; and light fencing, the butt, targets, sheds, ball-proof sentry-boxes, rests, and a small house for the marker in charge of the ground, which might average four hundred pounds more. In all nine hundred pounds for each establishment as a permanent outlay, or about thirty-six thousand pounds for the regular army, and forty-five thousand pounds for the volunteer rifle corps and militia.

The markers might be military pensioners, with a small addition to their pay, and the instructors retired officers or non-commissioned officers, with a similar allowance. Many from these classes would be well calculated for such duties, and would enter with spirit into them.

To give complete success to an appeal to the nation for the expenditure thus required, notorious facts, added to a widely-acknowledged principle, mentioned in the first edition of this treatise, should be sufficient: "Every reasonable outlay towards the maintenance of national military efficiency is true economy; and the neglect of it, real extravagance."—("Essentials," Art. 2nd, Correct Firing.)

The notorious facts referred to are, that the marvellous inventive spirit of the age has, at one bound, made military efficiency dependent, in a super-eminent degree, on skill in rifle practice, and that other nations, sensitively alive to the circumstance, are devoting to it immense methodical attention.\*

See, among other proofs, "Instruction sur le Tir, par Ordre du Ministre de la Guerre," Paris, 1848; and "Projet d'Instruction sur le Tir," Paris, 1850.

#### SHORT OBSERVATIONS

#### UPON

## DRESS AND APPOINTMENTS.

It is so distinctly evident that the immense advance which is at the present period in operation upon military weapons and practice must extend its influence to dress and appointments, that a treatise of this kind would not now be complete in its parts without a reference to them.

Dress will be affected pre-eminently, in a manner which has not, as yet, attracted much, if any, public attention. It will be indescribably more than ever important to distinguish the troops of one nation from those of other nations, by uniforms that can be known afar off.

Among the most perplexing, hindering, and revolting incidents of a campaign, are those of mistaking foes for friends and friends for foes. Facts are the best arguments; and a few of those which occurred under the author's own observation, in a corps probably as little liable to make mistakes as any that ever stood on a battle-field, are offered in enforcement of this consideration.

During the retreat from Madrid, in the grey of the morning, after having been harassed through the greater part of the day before by impudent dashes of the French light cavalry, a Spanish cavalry patrol was fired upon, under the very natural impression that they were Frenchmen, re-commencing their previous practice.

After this, while engaged in the pursuit of a beaten enemy through a mountainous and intricate country, the battalion was compelled, as a matter of reasonable prudence, to scale a rocky hill, in order to take up a position of defence against three battalions in blue, which had just appeared as if moving to intercept the line of retreat. When a quarter of an hour had been wasted, they also turned out to be Spaniards.

On a subsequent occasion, in following up a charge in line, from the thick smoke that still hung on the enemy's infantry a body of horsemen, of which some evidently were cuirassiers, broke furiously upon the front. It had all the appearance of an effort of the French cavalry to cover the retreat, and the whole fire was for a moment concentrated upon it, until some of the headmost horsemen, falling almost upon the bayonets, were perceived to be English light dragoons.

These are a few, and only a very few, of the evils which have already arisen from indistinctness in uniform. If, then, the mischief was so great in connexion with the limited and uncertain power of the old musquet, what will it not be with the distant and accurate fire of the long range rifle? A group of your own staff officers, a patrol of your own cavalry, or a battalion in blue of your own infantry, eight hundred yards off, might be almost destroyed before it could be possible to correct the mistake; while bodies of the enemy might, from your uncertainty, pass and repass with corresponding impunity.

Whatever uniforms, therefore, we adopt or maintain, it is evident that, for cavalry as well as infantry, broad NATIONAL DISTINCTIVENESS should be a most predominant consideration.

There is another immense advantage in distinctive uniforms for troops who can and will do their duty—the mighty moral effect which such distinctiveness carries with it. Like the mere

"Blast of Roderic's bugle horn,"

it "is worth" in itself, in a stout struggle, the support of

Many a time has the distinctive red coat sounded a retreat to the enemy, which he would have been slow to adopt if any doubt had existed about the real character of the troops he had fallen in with.

Popular error ought to be corrected in regard to colours suitable for light infantry, by the plain matter of fact, that skirmishing is not in general a prowling, wolf-like proeeeding, but sheer hard and open fighting; in which, indeed, the parties engaged make the best of any cover that presents itself, but in which also the flashes and smoke of firing alone present marks for reply that no tint of uniform can conceal. In concealing-cover, not the coat, but the head dress and face are seen. It is a reasonable subject of doubt whether on open ground, at a distance of six hundred or eight hundred yards, red, soiled by dust, dirt and drenching, does not mellow into a greyish-purple, as little calculated to make the man who wears it a mark as blue. black, or dark green. Take away white epaulettes, white lace, and white belts, and the red jacket itself may still continue to be, with prudence and propriety, the leading star on land of England's high honour and prosperity.

The increased rapidity with which, to prevent ruinous destruction, troops of all kinds, when under fire, must now move for considerable distances, gives increased importance to the very plain principle, that the efficiency of a locomotive weapon of war is, in the highest degree, dependent upon the proportion of its weight to the strength of the animal that carries it. Weight of metal is of immense moment on a rampart; but lightness of heart and litheness of limb, producing sustained and easy movement and careful firing, are advantages of more importance to the soldier in the field.

These principles embrace his appointments as well as his weapons; and it may be possible, now that public attention is called to the subject, to extend their application, dependent as this is upon the public purse.

The weight of the ammunition and bayonet has hitherto... in regard to the infantry in general, been supported upon the shoulders, and that of the former concentrated on one point. It would appear very possible to divide the support between the shoulders and the waist, and to distribute it equally around. The thirty inches of space which, in general, surround the waist of the full-grown man, would allow of sixty ball-cartridges, placed side by side perpendicularly in four flat well-made peuches, one on each side before, and the same behind. These might be attached to a waist-belt clasping in front, and supported, moreover, by a few stout buttons in the coat, and by a pair of very light belts, in the general form of common braces, crossing on the back, but in front falling straight down from the shoulder without crossing, and terminating each in two points. The material for all these belts might be leather, and the colour, that very common tint reddish-brown, to assimilate with the coat.

The advantage of this arrangement would be, that, in addition to the weight being equalized, the soldier could, as he pleased, ease his shoulders by tightening the waistbelt, or ease the waist by loosing the clasp. He would be also free to throw wide open the coatee in oppnessive weather, or in falling out on the line of march. Than this last, there could not perhaps be a greater relief to the practical soldier.

In a campaign, a man might conveniently carry, in addition to this ammunition, thirty rounds of gunpowder in a stout well-made flask, slung by a red strap over the shoulder, and a bag with thirty bullets, in greased patches, on the right side of his waist-belt, to balance the sword-bayonet, suspended from a frog on the left side. For long ranges, loading from the powder-flask might be safe and convenient—the cartridges would serve for closer quarters.

The present almost iron neck-band might be exchanged for the simple, neat, and durable patent Albert spring-wire

stock, covered with soft leather. Possibly, also, the soldier's house, which he carries on his back—and which, in a campaign, must be for weeks together his only shelter—his great coat, or cloak and blanket, might be made lighter by substituting superior materials. In no other way can the weight of the knapsack be much reduced.

It is certainly of immense importance to the safety and prosperity of the nation that all the foregoing subjects should be, even now, appreciated with practical closeness. Other civilized states are most active in investigation and in application. The British soldier stands cheerfully ready and willing to do his duty to the country—it is for England to do her duty to herself and to the soldier.

From this designation the author would by no means exclude any portions of the armed land-defenders of the British empire, so far as they might have claim to it by character and attainments. Let the volunteer rifle corps and militia acquire and maintain (as did the county militias during the last great war, and as have done many of the yeomanry corps since that period) that drill and discipline without which, in the hour of danger, men-atarms are jests to their enemies and pests to their friends, and they also may with justice be classed among the soldier-like guardians of their country.

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